

## ABSTRACT OF THE DISCLOSURE

A pickup mechanism for handling micro components includes a microworkpiece supplying unit, a microworkpiece orientation unit and a microworkpiece separation unit. The microworkpiece orientation unit connects with the microworkpiece supplying unit and the microworkpiece separation unit. The micro components are supplied by the supplying unit, then orientated by the orientation unit. Those components orientated in a specific direction are led to the separation unit and separated for a following working device to process. Therefore, the pickup mechanism provides a continuous supplying, orientation and separation of the micro components for further assembly or fabrication processes.